



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE
REFER TO OUR FILE

June 11, 2012

VIA ELECTRONIC FILING

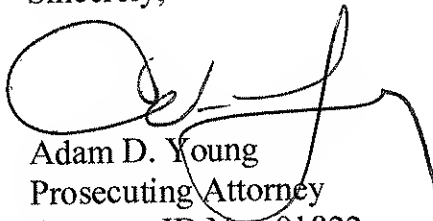
Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Pennsylvania Public Utility Commission, Bureau of Investigation
and Enforcement v. UGI Utilities, Inc.
Docket No. 2012-

Dear Ms. Chiavetta:

Enclosed for filing please find the Complaint in the above referenced case, along with the electronic filing confirmation page, on behalf of the Bureau of Investigation and Enforcement of the Pennsylvania Public Utility Commission. Copies have been served on the parties of record in accordance with the Certificate of Service.

Sincerely,



Adam D. Young
Prosecuting Attorney
Attorney ID No. 91822

Counsel for the Bureau of
Investigation and Enforcement

Enclosures

cc: As per Certificate of Service

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission,	:	
Bureau of Investigation and Enforcement,	:	
Complainant	:	
	:	
v.	:	Docket No. C-2012-2225031
	:	
UGI Utilities, Inc.,	:	
Respondent	:	

FORMAL COMPLAINT

NOW COMES the Pennsylvania Public Utility Commission, Bureau of Investigation and Enforcement (“I&E”), by its counsel, pursuant to Section 701 of the Public Utility Code, 66 Pa.C.S. §701, and files this Formal Complaint against UGI Utilities Inc., (“UGI,” “Company,” or “Respondent”), alleging violations of the Pennsylvania Code, Public Utility Code, and Code of Federal Regulations. In support of its Formal Complaint, I&E respectfully represents the following:

Parties And Jurisdiction

1. The Pennsylvania Public Utility Commission (“PUC” or “Commission”) with a mailing address of P.O. Box 3265, Harrisburg, PA, 17105-3265, is a duly constituted agency of the Commonwealth of Pennsylvania empowered to regulate public utilities within the Commonwealth pursuant to the Public Utility Code, 66 Pa.C.S. §§101, *et seq.*

2. Complainant is the Commission's Bureau of Investigation and Enforcement and is the entity established to prosecute complaints against public utilities pursuant to 66 Pa.C.S. §308.2(a)(11). Complainant's counsel are as follows:

Adam D. Young
Prosecutor
adyoung@pa.gov
717.772.8582

Stephanie M. Wimer
Prosecutor
stwimer@pa.gov
717.772.8839

Wayne T. Scott
First Deputy Chief Prosecutor
wascott@pa.gov
717.783.6150

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
P.O. Box 3265
Harrisburg, PA 17105-3265

3. Respondent is UGI Utilities, Inc., a natural gas utility with offices located at 2525 N. 12th St., Suite 360, Reading, Pennsylvania 19612, Attention: Robert F. Beard, President.
4. UGI is a "public utility" as that term is defined at 66 Pa.C.S. §102,¹ as it is engaged in providing public utility service as a natural gas distribution company to the public for compensation.
5. Section 501(a) of the Public Utility Code, 66 Pa.C.S. §501(a), authorizes and obligates the Commission to execute and enforce the provisions of the Public Utility Code.

¹ At 66 Pa.C.S. §102, "Public utility" is defined under that term at subsection (1)(i) as:

- (1) Any person or corporation now or hereafter owning or operating in this Commonwealth equipment or facilities for:
- (i) Producing, generating, transmitting, distributing or furnishing natural or artificial gas, electricity, or steam for the production of light, heat, or power to or for the public for compensation.

6. Section 701 of the Public Utility Code, 66 Pa.C.S. §701, authorizes the Commission, *inter alia*, to hear and determine complaints against public utilities for violations of any law or regulation that the Commission has jurisdiction to administer or enforce.
7. Section 3301 of the Public Utility Code, 66 Pa.C.S. §3301, authorizes the Commission to impose civil penalties on any public utility or any other person or corporation subject to the Commission's authority, to enforce violation(s) of the Public Utility Code and/or Commission regulations. Section 3301 further allows for the imposition of a separate fine for each day's continuance of such violation(s).
8. Respondent, in providing gas distribution service for compensation, is subject to the power and authority of this Commission pursuant to Section 501(c) of the Public Utility Code, 66 Pa.C.S. §501(c), which requires a public utility to comply with Commission orders.
9. Pursuant to the Commission's regulations at 52 Pa. Code §59.33(b), the Commission's Gas Safety Division, which is part of I&E, also has the authority to enforce the federal gas pipeline safety regulations set forth in 49 U.S.C.A. §§60101, *et seq.* and implemented in 49 C.F.R. Parts 191-193 and 199, 49 CFR §§191-193, 199.
10. Pursuant to the provisions of the applicable Commonwealth and federal statutes and regulations, the Commission has jurisdiction over the subject matter of this complaint and the actions of Respondent related thereto.

Background

11. At approximately 10:48 PM on February 9, 2011, a natural gas explosion occurred at 542 and 544 North 13th Street, Allentown, PA killing all five occupants of the two residences. The explosion also injured a patron at a car wash that is located on Allen Street. The subsequent fire destroyed or significantly damaged six other residences, which were part of the same structure as 542 and 544 North 13th Street.
12. UGI distributed natural gas to 542 and 544 North 13th Street, Allentown, PA.
13. After conducting an extensive investigation, which included numerous interviews, observations, and the review of Respondent's reports and records, I&E submits that the following is a sequence of events that describes the incident in question:

- a. The City of Allentown operates four cameras that took video surveillance near the explosion at the following intersections: Tilghman and North 13th Streets, Allen and Mercer Streets, 14th and Utica Streets, and 12th and Liberty Streets.
- b. The cameras showed activity in the home of 544 North 13th Street. At 8:57 PM, lights were turned on in a back room. At 9:04 PM, the back room lights were turned off. At 9:22 PM, lights were turned on in a room on the second floor with a small window. At 9:28 PM, these lights were turned off. At 9:51 PM, the lights were turned on again in the back room and at 10:12 PM, these lights were turned off. This was the last visible activity that took place at 544 North 13th Street prior to the explosion.
- c. At 10:48 PM, the explosion occurred. The cameras simultaneously captured an intense flash of light and the blast violently shook the camera at Allen and Mercer Streets. The camera at Allen and Mercer Streets panned to the corner of Allen and North 13th Streets and showed debris scattered in a northeasterly direction. Small flames burned near the sidewalk in the parking lot of the car wash and at several locations on Allen Street. Large, intense flames burned in the sidewalk near 544 North 13th Street. These flames were indicative of a relatively high flow rate of gas escaping from a main.
- d. At 10:50 PM, Allentown 911 dispatched four fire engines and the fire chief to the reported explosion at North 13th and Allen Streets. Two EMS units were also dispatched.
- e. By 11:00 PM, 911 notified UGI. The UGI dispatcher created an emergency explosion order and dispatched a first responder.
- f. At 11:07 PM, the fire chief gave an order to let the gas burn and to allow UGI to shut off the gas.
- g. At 11:17 PM, the fire chief ordered that no one was permitted to enter any of the row homes due to structural damage.
- h. At 11:18 PM, the UGI first responder arrived and at 11:19 PM, the UGI duty supervisor and five crew men arrived at the scene.
- i. By 11:19 PM, second and third alarms were declared and Lehigh County fire units were to be on alert. At 11:20 PM, fire fighters began evacuating Gross Towers, a residential high-rise located on Allen Street to the west of the car wash.

- j. At 11:25 PM, the UGI first responder began probing the area for gas and two UGI servicemen worked on locating curb valves in records with their mobile computers. The UGI duty supervisor decided to attempt to inject foam from the service line of the car wash.
- k. Gas was detected in the parking lot of the car wash. A high reading, 99% gas-in-air, was detected near the east side of Allen Street on the same line as the house line for the residences at 542 to 544 North 13th Street. Six percent gas was detected on the most western side of the lot towards Mercer Street.
- l. At 11:28 PM, UGI advised the fire chief to extinguish structure fires, but to leave burning gas alone. At 11:30 PM, UGI started dismantling the meter set at the car wash in an effort to inject foam. At 11:36 PM, UGI tested for gas and reported negative readings towards Gross Towers.
- m. At 11:53 PM, UGI notified the Commission and two gas safety inspectors from Harrisburg began traveling to the scene.
- n. At 11:54 PM, UGI's area operations manager arrived. At 12:00 AM on February 10, 2011, the UGI duty supervisor requested more manpower from the UGI dispatcher in addition to the seven UGI employees that originally responded to the explosion.
- o. At 12:03 AM, the UGI Meter and Regulator (M&R) supervisor dispatched two M&R employees to conduct odorant level checks and record chart measurements. The M&R technicians performed odorant testing at 1202 and 1430 Allen Street, which is on a medium pressure system.
- p. At 12:15 AM, UGI began to monitor gas levels for the 500 and 600 block of North 13th Street. UGI reported bar-holing in to the main for foam injection.
- q. At 12:19 AM, UGI reported the incident to the National Response Center.
- r. At approximately 12:30 AM, additional UGI service men and UGI's Regional Vice-President arrived. At 12:40 AM, a Construction & Maintenance (C&M) supervisor arrived.
- s. At 12:39 AM, UGI began excavating the service tap to 1326 Allen Street to attempt to inject expansion foam into the main. At 1:54 AM, UGI began excavating at North 13th and Allen Streets and at 2:36 AM, UGI started

injecting foam in the main at this intersection. At 2:38 AM, UGI began excavating at Allen and Mercer Streets.

- t. By 3:11 AM, the foam that was injected at North 13th and Allen Streets lessened the gas leak and the fires along the sidewalk at 544 North 13th Street decreased in intensity. The flames in the parking lot of the car wash on Allen Street continued to burn, but at a lesser height. Debris had been cleared from the front of 542 and 544 North 13th Street and UGI began locating its curb valves. Approximately at this time, UGI reported closing the curb valve to 544 North 13th Street.
 - u. At 3:17 AM, UGI continued to excavate at Allen and Mercer Streets to inject additional foam and ensure that the leak was completely sealed. At 3:25 AM, the curb valve was closed to 542 North 13th Street.
 - v. By 5:57 AM, the fire department extinguished the remaining fire with the exception of future smoldering. At 6:15 AM, search and recovery of the victims began. By 8:15 AM, heavy equipment was brought in to remove debris and rubble from inside the remains of the structure.
 - w. UGI remained at the scene and continued to monitor the area for gas leaks. UGI crews fully excavated the main upstream and downstream of the explosion to cut and cap the main.
 - x. City authorities deemed the site to be a crime scene and investigation and recovery operations continued throughout the day. The remaining residences were condemned and demolition began on February 11, 2011.
- 14. The source of the natural gas that led to the explosion was a 12-inch cast-iron main with a circumferential crack located under Allen Street.
 - 15. The 12-inch cast-iron main was installed in 1928 and was located approximately eight feet north of the curb line adjacent to 544 North 13th Street.
 - 16. UGI records indicate that at the time of installation in 1928, the main was a high pressure main, although the exact pressure was not documented. At the time of the explosion on February 9, 2011, the main was part of a low pressure distribution system.
 - 17. UGI was unable to immediately isolate the suspected source of the gas due to the lack of valves in their low pressure distribution system.

18. UGI did not attempt to close curb valves to the remaining residences of the row homes, 530 to 540 North 13th Street. All but two of those residences were served with natural gas.
19. UGI injected expansion foam into the main on West Allen Street after excavating on the east side and west side of the suspected leak location. At 3:45 AM on February 10, 2011, UGI diminished the flow of gas. It took several applications of the foam kits, multiple excavations, and approximately five hours after the explosion to diminish the flow of gas.
20. The remaining structures that initially survived the explosion were heavily damaged by fire and water and consequently were condemned.
21. On February 9, 2011, the temperature was 27 degrees Fahrenheit. There was approximately four to five inches of icy snow along the curb line of Allen Street and some melted and refrozen ice along the roadway.
22. The soil and grass below the refrozen and icy snow had an 18-inch frost layer.
23. At no time did UGI receive calls complaining of the odor of gas in the hours prior to the explosion.
24. Natural gas is odorless and odorant is placed in natural gas so that the public is able to detect the presence of gas.
25. One basis of UGI's public safety program is the public's ability to smell natural gas.
26. Odorant fade occurs in distribution systems due to a number of effects such as an oxidized pipe wall, moisture, distillates, low flow, low odorant, or other contaminants.
27. UGI conducts a weekly sniff test at only one point in the City of Allentown that is not near 542 and 544 North 13th Street.
28. UGI did not perform tests to periodically assure that the proper concentrations of odorant were present throughout its distribution system, including the pipes nearby 542 and 544 North 13th Street.
29. When UGI tested the odorant level after the explosion, UGI's M&R technicians performed odorant testing at 1202 Allen Street and 1430 Allen Street. UGI did not follow Gas Operating Manual (GOM) 60.50.40 Section 3.1.5 of its emergency procedures, which states that "Odorant tests shall be made in the immediate affected area and at the closest delivery point."

30. 1202 Allen Street and 1430 Allen Street are located in a medium pressure system, which is not in the same pressure district as the affected 12-inch main.
31. UGI's odorant testing technicians are not given direction by engineers concerning proper testing locations. The odorant testing that was completed after the incident did not represent the level of odorant in the network of distribution piping within which the gas traveled adjacent to 542 to 544 North 13th Street.
32. The 12-inch cast iron main was installed in 1928. A list of maintenance performed on the main since its installation is attached hereto as Appendix A.
33. Since 1970, UGI has averaged 1.2 reportable incidents per year on their cast-iron main systems.
34. On August 8, 1976, a gas explosion at 1127 Oak Street, Allentown, PA occurred approximately a half mile from the February 9, 2011 explosion as a result of a break in UGI's cast-iron main, killing two (2) firemen, injuring fourteen (14) people, and destroying four (4) buildings.
35. The National Transportation Safety Board (NTSB) concluded that the cause of the leak was a break in a 4-inch cast-iron main under the street. The main broke into several pieces due to overburden stress caused by a void created around the main by a sinkhole.
36. On August 29, 1990, a natural gas explosion from another of UGI's cast-iron mains destroyed two (2) row houses located at 421-423 North Fifth Street, approximately one (1) mile from the February 9, 2011 explosion, killing one (1) person and injuring nine (9) people, including two (2) firefighters.
37. As a result of the August 29, 1990 gas explosion, the NTSB issued a Pipeline Accident Brief (No. DCA90FP001) on August 6, 1991. The NTSB concluded that water leaking from a cast-iron water main had eroded the soil beneath UGI's 4-inch gas cast-iron main. The cast-iron main eventually cracked due to the soil loads above. Analysis of both the cast-iron water main and the cast-iron gas main revealed that both contained areas of significant graphitic corrosion, which weakened them. The NTSB concluded that the failure of the gas main was inevitable even if the water hadn't eroded the soil foundation because one area of the gas pipe wall was fully graphitized.
38. The NTSB went on to warn UGI that numerous factors, individually and/or synergistically, have contributed to the integrity reduction and failure of Allentown, Pennsylvania's cast-iron gas and water mains, most of which were installed in the late 1800's and early 1900's. These include: leaks from storm

water and sewer lines, water migrating or percolating through the soil, karst development, sinkholes, graphitization, shifting and cracking pavement, increased traffic load, and overburden stress.

39. In the Pipeline Accident Brief (No. DCA90FP001) issued on August 6, 1992, among other items, the NTSB made the following "Class II Priority Action" recommendation to UGI:
 - a. "Implement a cast-iron pipe replacement program, based on factors such as age, pipe diameter, operating pressure, soil corrosiveness, existing graphitic damage, leak history, burial depth, and external loading, to identify and replace in a planned, timely manner cast-iron piping systems that may threaten public safety."
40. Since installation of the pipe in 1928, records show that numerous excavations took place in close proximity to the location of the cracked pipe. A list of the excavation work occurring near the main since 1928 is attached hereto as Appendix B.
41. Despite the maintenance that was performed on the pipe and the excavation that occurred in the area surrounding the pipe, the cracked 12-inch cast-iron main was not considered by UGI to be a pipe in need of replacement under the criteria that UGI uses in its pipeline replacement program.
42. UGI's pipeline replacement program does not consider the size of the main, which translates to volume of gas released in the event of a crack.
43. UGI's pipeline replacement program does not consider changing environmental variables such as subsidence and instability of soils either from water encroachment or excavation activity. Unstable soil and support issues are detrimental to pipelines, especially to cast-iron mains.
44. According to the Gas Safety Division, evidence of subsidence and unstable soil was present on Allen Street. The curb that borders Allen Street closest to 544 North 13th Street appeared to be sinking, as evidenced by a slow eastward slope. There was an asphalt curb standing at the midpoint of the north wall of 544 North 13th Street. Fatigue cracking was visible in the pavement in the east bound lane of Allen Street.
45. UGI's pipeline replacement program does not consider the proximity of the pipe to excavation activity. The 12-inch main was subjected to the forces caused by the excavation activity that occurred around the pipe since the pipe's installation in 1928.

46. The 12-inch cast-iron main was supported by wooden blocks. After excavating the pipe, 80% wall loss of the main just above the wood was discovered due to corrosion that occurred on the cast-iron main.
47. The Pipe Failure Analysis Reports, dated August 15, 2011, at PUC Reference # L-2-11 and L-5-11, concluded that the fracture began in the graphitized area on the bottom of the pipe. Because the presence of water is the primary source of oxygen underground and because the wood cribbing supporting the pipe is a repository for any migrating ground water, the wood cribbing accelerated the graphitization/corrosion of the cast-iron above the area where the wood cribbing is situated.

Violations

COUNTS 1 – 156

48. All allegations in paragraphs 1-47 are incorporated as if fully set forth herein.

UGI failed to maintain an odorant sampling program that adequately demonstrates concentrations of odorant throughout its distribution system in that UGI conducts weekly sniff tests at only one location in Allentown where the gas enters its distribution system, but does not test throughout its distribution system in the event there is odorant fade.

This is a violation of 52 Pa. Code §59.33(a); 66 Pa.C.S. §1501; and 49 CFR §§192.625(a) and (f) for each week that the violation continued for a period of three years.

COUNTS 157 – 175

49. All allegations in paragraphs 1-47 are incorporated as if fully set forth herein.

UGI failed to furnish and maintain adequate, efficient, safe, and reasonable service and facilities in that the company did not adequately and timely respond to ample warning signs regarding the integrity of its cast-iron mains in the Allentown area, including several catastrophic explosions resulting from corroded/graphitized mains, as well as a Class II Priority Action recommendation from the NTSB in 1992 following a fatal explosion, recommending replacing cast-iron mains on which graphitization was found in a planned and timely manner.

This constitutes an ongoing violation of 52 Pa. Code §59.33(a); 66 Pa.C.S. §1501; and 49 CFR §192.489 for each year since 1992 that UGI failed to timely act.

COUNT 176

50. All allegations in paragraphs 1-47 are incorporated as if fully set forth herein.

UGI did not follow GOM 60.50.40 Section 3.1.5 of its emergency procedures, which states that “Odorant tests shall be made in the immediate affected area and at the closest delivery point” in that UGI’s M&R technicians performed odorant testing at 1202 Allen Street and 1430 Allen Street, which are two test points in the medium pressure system and not in the same low pressure district as the affected 12-inch main.

This is a violation of 52 Pa. Code §59.33(a); 66 Pa.C.S. §1501; and 49 CFR §192.605(a).

COUNT 177

51. All allegations in paragraphs 1-47 are incorporated as if fully set forth herein.

UGI failed to continually survey its facilities in that it failed to monitor and respond to the forces that detrimentally affected the 12-inch cast-iron main, including, but not limited to, the distressed pavement on Allen Street, the sinking curb, the excavation activity that took place near the pipe, the corrosion that was noted on the pipe, and the pipe’s leakage history.

This is a violation of 52 Pa. Code §59.33(a); 66 Pa.C.S. §1501; 49 CFR §192.613(a); and 49 CFR §192.755(a).

COUNT 178

52. All allegations in paragraphs 1-47 are incorporated as if fully set forth herein.

UGI failed to comply with its emergency procedures that require making safe any actual or potential hazard to life or property in that UGI did not attempt to close curb valves to the remaining residences, 530 to 540 North 13th Street, even though all but two of those residences were served with gas.

This is a violation of 52 Pa. Code §59.33(a); 66 Pa.C.S. §1501; 49 CFR §192.605(a); 49 CFR §§192.615(a)(3)(i) and (iii); and 49 CFR §§192.615(a)(6) and (7).

COUNT 179

53. All allegations in paragraphs 1-47 are incorporated as if fully set forth herein.

UGI failed to comply with its emergency procedures that require prompt and effective response to a notice of gas detected near a building and/or an explosion occurring near or directly involving a pipeline facility in that UGI did not diminish the flow of gas for approximately five hours after the explosion at 3:45 AM on February 10, 2011 because UGI was unable to immediately isolate the suspected source of the gas due to the lack of valves in their low pressure distribution system.

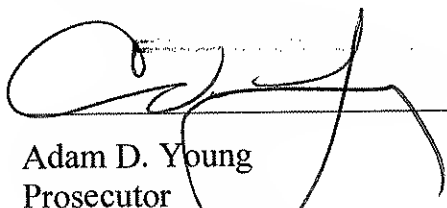
This is a violation of 52 Pa. Code §59.33(a); 66 Pa.C.S. §1501; 49 CFR §192.605(a); 49 CFR §§192.615(a)(3)(i) and (iii); and 49 CFR §§192.615(a)(6) and (7).

WHEREFORE, for all the foregoing reasons, the Bureau of Investigation and Enforcement of the Pennsylvania Public Utility Commission respectfully requests that:

- a. After consideration of the record, the Office of Administrative Law Judge and the Commission find UGI in violation of each and every count as set forth herein, and that, in any event, for each count charged, UGI be assessed the maximum civil penalty allowed by law;
- b. UGI be ordered to pay a civil penalty in the amount of \$386,000 and that UGI not be permitted to recover any portion of said amount through rates regulated by the Commission;
- c. UGI shall actively monitor the level of odorant throughout its distribution system, including the extremities, to ensure that adequate odorant levels are present;
- d. UGI shall modify its procedures on odorant testing and test the level of odorant on the same network of distribution piping;
- e. UGI shall conduct continuing surveillance and protect or replace pipe when that pipe has a leakage history, corrosion and is subjected to forces from excavation and vibrations from heavy vehicles, such as trucks and buses, and where there is evidence of subsidence and unstable soil;

- f. UGI commence a pipeline replacement program for all its cast-iron pipeline to be completed within ten (10) years from the date of the Commission's Order related to this Complaint;
- g. UGI commence a pipeline replacement program for all its bare steel to be completed within thirteen (13) years from the date of the Commission's Order related to this Complaint;
- h. The Commission grant such further relief as is just and reasonable.

Respectfully submitted,



Adam D. Young
Prosecutor
PA Attorney ID No. 91822

Stephanie M. Wimer
Prosecutor
PA Attorney ID No. 207522

Wayne T. Scott
First Deputy Chief Prosecutor
PA Attorney ID No. 29133

Johnnie E. Simms
Chief Prosecutor
PA Attorney ID No. 33911

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
P. O. Box 3265
Harrisburg, PA 17105-3265

Date: June 11, 2012

APPENDIX A

Appendix A

1. In 1953, bell clamps were installed on the 12-inch main east of the intersection of North 13th and Allen Streets due to leakage on bell and spigot joints.
2. On February 27, 1974, there was a leak repair record on a bell joint 15 feet east of the intersection of Allen and Madison Streets.
3. On February 28, 1974, there was a pipe inspection leak report (PILR) indicating a leaking bell joint at the midpoint of Allen and Madison Streets. Another leak repair order indicated a cracked main on the 12-inch cast-iron six feet to the west of the intersection of Madison Street. A clamp was placed on the main.
4. On February 23, 1978, a break occurred 204 feet west of North 14th Street. Three feet of main was replaced and the break occurred at the bell joint. The PILR indicated graphitization.
5. On March 1, 1974, another PILR concerned a cracked main on the 12-inch cast-iron just 22 feet to the west of Madison Street, which was 16 feet away from the previous day's crack. A clamp was placed on the main. This report noted general corrosion on the main.
6. On September 28, 1979, a break occurred 273 feet west of North 14th Street. The record indicated that a 57C clamp broke the main and that there were no "A" leaks, but there was a "B" leak. "A" leaks are leaks that, as found, do not represent an immediate hazard or would not become a hazard within one year's time. "B" leaks are leaks that, as found, do not represent an immediate hazard to the public but may become hazardous before the next inspection. "B" leaks should be repaired within a reasonable time after being discovered.
7. A December 1979 record of work authorization stated, "Our 1928 12-inch cast-iron main on Allen Street, which was converted from medium pressure to low pressure, had four breaks within a five year period. There is an outstanding "B" leak and PILRs indicate graphitization of the pipe. Since this main is a major feed for the low pressure system, replacement with 12-inch steel is recommended."
8. The cast-iron pipe was not replaced and the 1979 work authorization document was the last recorded repair prior to the February 9, 2011 explosion.

APPENDIX B

Appendix B

1. In 1930, a 12-inch water main was installed on Allen Street in the center of the road.
2. Construction records show that there were 12-inch and 4-inch gas mains at the intersection of Allen and Madison Streets.
3. In 1965, city records show that a 6-inch water main tap was installed near Madison Street.
4. In March 1965, UGI installed a 1 ¼ inch gas service line on the 12-inch high pressure cast-iron main to feed the car wash at the northwestern side of 13th and Allen Streets.
5. In December 1966, the 1 ¼-inch service line was retired and a 2-inch coated steel service line was installed. Service records show that the 2-inch line was tied to the 12-inch cast-iron main and that the pavement cut was four feet by two feet and was concrete.
6. In 1971, the 4-inch gas line that ran parallel to the 12-inch cast-iron main was abandoned. A 12-inch by 4-inch steel fitting was installed to supply gas from the 12-inch main to the remainder of the 4-inch main on Allen Street.
7. On March 16, 1973, a 2-inch steel service line was installed at 1316 to 26 Allen Street. The service line was tapped off of the 12-inch cast-iron west of Mercer Street, approximately 135 feet west of the curb line of North 13th Street. The PILR indicated general corrosion on the 12-inch cast-iron.
8. In March 1980, UGI installed 951 feet of 12-inch coated steel main to replace the existing 12-inch cast-iron from 15th Street to just east of Madison Street. The replacement occurred approximately 300 feet away from the center line of North 13th Street.
9. After 1980, no maintenance activities occurred that exposed the main on Allen Street.

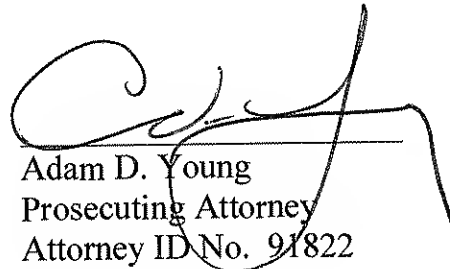
CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing Complaint upon the parties, listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

Notification by First Class Mail:

Robert F. Beard, President
UGI Corporation
2525 North 12th Street
Suite 360
Reading, PA 19612-2677

Kent D. Murphy, Esq.,
Senior Counsel for UGI
UGI Corporation
460 North Gulph Road
King of Prussia, PA 19406



Adam D. Young
Prosecuting Attorney
Attorney ID No. 91822

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
P.O. Box 3265
Harrisburg, PA 17105-3265

Dated: June 11, 2012